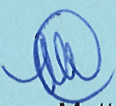


# STATE OF NEW HAMPSHIRE

## INTER-DEPARTMENT COMMUNICATION



**FROM:** Matt Urban  
Wetlands Program Manager

**DATE:** March 2, 2016

**AT (OFFICE):** Department of  
Transportation

**SUBJECT:** Dredge & Fill Application  
Portsmouth, M610-1

Bureau of  
Environment

**TO:** Gino Infascelli, Public Works Permitting Officer  
New Hampshire Wetlands Bureau  
29 Hazen Drive, P.O. Box 95  
Concord, NH 03302-0095

Forwarded herewith is the application package prepared by NH DOT Highway Maintenance District 6 for the subject Major impact project. This project is classified as Major per Env-Wt 303.02(a)&(b). The project is located on NH Route 1B/Wentworth Rd. and the Witch's Cove Marina. The proposed work consists of removing the existing failed 15" CMP and catch basin that has been causing water quality and flooding issues in this area. The Department proposing to install a new catch basin and 15" pipe adjacent to the failed pipe that will outlet to Sagamore Creek.

This project was reviewed at the February 15, 2015 Natural Resource Agency Coordination Meeting. The minutes from that meeting have been included within this application and can also be found online via the following link: <http://www.nh.gov/dot/org/projectdevelopment/environment/units/project-management/nracmeetings.htm>

The Department met with DES for a pre-application review to discuss mitigation and determined that this project would require mitigation for the linear feet of impact at the outlet of the proposed pipe. The total mitigation required for those impacts will result in a one time in-lieu fee payment into the ARM-Fund in the amount of \$960.00

A payment voucher has been processed for this application (Voucher #423597) in the amount of \$200.

The lead people to contact for this project are Ralph Sanders, District 6 (868-1133 or [rsanders@dot.state.nh.us](mailto:rsanders@dot.state.nh.us)) or Matt Urban, Wetlands Program Manager, Bureau of Environment (271-3226 or [murban@dot.state.nh.us](mailto:murban@dot.state.nh.us)).

If and when this application meets with the approval of the Bureau, please send the permit directly to Matt Urban, Wetlands Program Manager, Bureau of Environment.

MRU:mru  
Enclosures  
cc:  
BOE Original  
City of Portsmouth (4 copies via certified mail)  
Ralph Sander, District 6 office  
Carol Henderson, NH Fish & Game  
Edna Feighner, NH Division of Historic Resources (NHDOT Cultural Review within)  
Maria Tur, US Fish & Wildlife  
Mark Kern, US Environmental Protection Agency  
Michael Hicks, US Army Corp of Engineers

S:\Environment\PROJECTS\PORTSMOUTH\M610 (Witchs Cove)\updates\WETAPP - District 6.doc



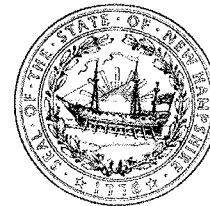


DEPARTMENT OF ENVIRONMENTAL SERVICES  
LAND RESOURCES MANAGEMENT  
**WETLANDS BUREAU**

29 Hazen Drive, PO Box 95, Concord, NH 03302-0095

Phone: (603) 271-2147 Fax: (603) 271-6588

<http://des.nh.gov/organization/divisions/water/wetlands>



## PERMIT APPLICATION

Administrative Use Only	Administrative Use Only	Administrative Use Only	File No.
			Check No.
			Amount
			Initials

### 1. REVIEW TIME:

Indicate your Review Time below. Refer to Guidance Document A for instructions.

☒ Standard Review (Minimum, Minor or Major Impact)

☐ Expedited Review (Minimum Impact)

### 2. PROJECT LOCATION:

Separate applications must be filed with each municipality that jurisdictional impacts will occur in.

ADDRESS: **185 Wentworth Rd.**

TOWN/CITY: Portsmouth

TAX MAP: **Map 201**

BLOCK:

LOT: **12**

UNIT:

USGS TOPO MAP WATERBODY NAME: **Sagamore Creek**

☒ NA

STREAM WATERSHED SIZE:

☒ NA

LOCATION COORDINATES (If known): **43-02'-56.90"N 70-44'-40.63" W**

☒ Latitude/Longitude ☐ UTM ☐ State Plane

### 3. PROJECT DESCRIPTION:

Provide a brief description of the project outlining the scope of work. Attach additional sheets as needed to provide a detailed explanation of your project. DO NOT reply "See Attached" in the space provided below.

**Replace 15" CMP under Route 1B with 15" HDPE. Remove existing catch basin from the drive entrance and replace with catch basin Type B with 3' sump. Install 15" CMP to catch basin B and transverse Witch's Cove property and outlet to Sagamore Creek.**

### 4. RELATED PERMITS, ENFORCEMENT, EMERGENCY AUTHORIZATION, SHORELAND, ALTERATION OF TERRAIN, ETC...

NA

### 5. NATURAL HERITAGE BUREAU & DESIGNATED RIVERS:

See the Instructions & Required Attachments document for instructions to complete a & b below.

a. Natural Heritage Bureau File ID: **NHB15-2309**

b. ☐ Designated River the project is in  $\frac{1}{4}$  miles of: \_\_\_\_\_; and  
date a copy of the application was sent to Local River Advisory Committee: Month: \_\_\_\_ Day: \_\_\_\_ Year: \_\_\_\_

☒ NA



## MUNICIPAL SIGNATURES

### 10. CONSERVATION COMMISSION SIGNATURE

The signature below certifies that the municipal conservation commission has reviewed this application, and:

1. Waives its right to intervene per RSA 482-A:11;
2. Believes that the application and submitted plans accurately represent the proposed project; and
3. Has no objection to permitting the proposed work.



Authorized Commission Signature

Print name legibly

Date

#### DIRECTIONS FOR CONSERVATION COMMISSION

1. Expedited review **ONLY** requires that the conservation commission's signature is obtained in the space above.
2. The Conservation Commission signature should be obtained **prior** to the submittal of the original application and four copies to the town/city clerk for mailing to the DES.
3. The Conservation Commission may refuse to sign. If the Conservation Commission does not sign this statement for any reason, the application is not eligible for expedited review and the application will reviewed in the standard review time frame.

### 11. TOWN / CITY CLERK SIGNATURE

As required by Chapter 482-A:3 (amended 2014), I hereby certify that the applicant has filed four application forms, four detailed plans, and four USGS location maps with the town/city indicated below.



Town/City Clerk Signature

Print name legibly

Town/City

Date

#### DIRECTIONS FOR TOWN/CITY CLERK:

Per RSA 482-A:3,I

1. For applications where "Expedited Review" is checked on page 1, sign and accept the applications **only** if the Conservation Commission signature has been received;
2. **IMMEDIATELY** sign the original application form and four copies in the signature space provided above;
3. Return the signed original application form and attachments to the applicant so that the applicant may submit the application form and attachments to NHDES by mail or hand delivery.
4. **IMMEDIATELY** distribute a copy of the application with one complete set of attachments to each of the following bodies: the municipal Conservation Commission, the local governing body (Board of Selectmen or Town/City Council), and the Planning Board; and
5. Retain one copy of the application form and one complete set of attachments and make them reasonably accessible for public review.

#### DIRECTIONS FOR APPLICANT:

1. Submit the original permit application form bearing the signature of the Town/ City Clerk, additional materials, and the application fee to NHDES by mail or hand delivery.



**13. IMPACT AREA:**

For each jurisdictional area that will be/has been impacted, provide square feet and, if applicable, linear feet of impact

*Permanent: impacts that will remain after the project is complete.*

*Temporary: impacts not intended to remain (and will be restored to pre-construction conditions) after the project is complete.*

JURISDICTIONAL AREA	PERMANENT Sq. Ft. / Lin. Ft.	TEMPORARY Sq. Ft. / Lin. Ft.
Forested wetland	<input type="checkbox"/> ATF	<input type="checkbox"/> ATF
Scrub-shrub wetland	<input type="checkbox"/> ATF	28 <input type="checkbox"/> ATF
Emergent wetland	<input type="checkbox"/> ATF	<input type="checkbox"/> ATF
Wet meadow	<input type="checkbox"/> ATF	<input type="checkbox"/> ATF
Intermittent stream	<input type="checkbox"/> ATF	<input type="checkbox"/> ATF
Perennial Stream / River	/ <input type="checkbox"/> ATF	/ <input type="checkbox"/> ATF
Lake / Pond	/ <input type="checkbox"/> ATF	/ <input type="checkbox"/> ATF
Bank - Intermittent stream	/ <input type="checkbox"/> ATF	/ <input type="checkbox"/> ATF
Bank - Perennial stream / River	/ <input type="checkbox"/> ATF	/ <input type="checkbox"/> ATF
Bank - Lake / Pond	/ <input type="checkbox"/> ATF	/ <input type="checkbox"/> ATF
Tidal water	/ <input type="checkbox"/> ATF	12 / 14 <input type="checkbox"/> ATF
Salt marsh	<input type="checkbox"/> ATF	<input type="checkbox"/> ATF
Sand dune	<input type="checkbox"/> ATF	<input type="checkbox"/> ATF
Prime wetland	<input type="checkbox"/> ATF	<input type="checkbox"/> ATF
Prime wetland buffer	<input type="checkbox"/> ATF	<input type="checkbox"/> ATF
Undeveloped Tidal Buffer Zone (TBZ)	<input type="checkbox"/> ATF	<input type="checkbox"/> ATF
Previously-developed upland in TBZ	125/100 <input type="checkbox"/> ATF	<input type="checkbox"/> ATF
Docking - Lake / Pond	<input type="checkbox"/> ATF	<input type="checkbox"/> ATF
Docking - River	<input type="checkbox"/> ATF	<input type="checkbox"/> ATF
Docking - Tidal Water	<input type="checkbox"/> ATF	<input type="checkbox"/> ATF
<b>TOTAL</b>	<b>125 / 100</b>	<b>40 / 14</b>

**14. APPLICATION FEE:** See the Instructions & Required Attachments document for further instruction

☐ Minimum Impact Fee: Flat fee of \$ 200

☒ Minor or Major Impact Fee: Calculate using the below table below

Permanent and Temporary (non-docking) 165 sq. ft. X \$0.20 = \$ 33.00

Temporary (seasonal) docking structure:            sq. ft. X \$1.00 = \$

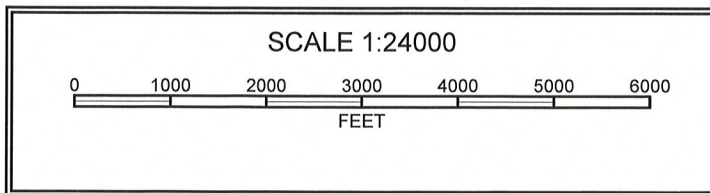
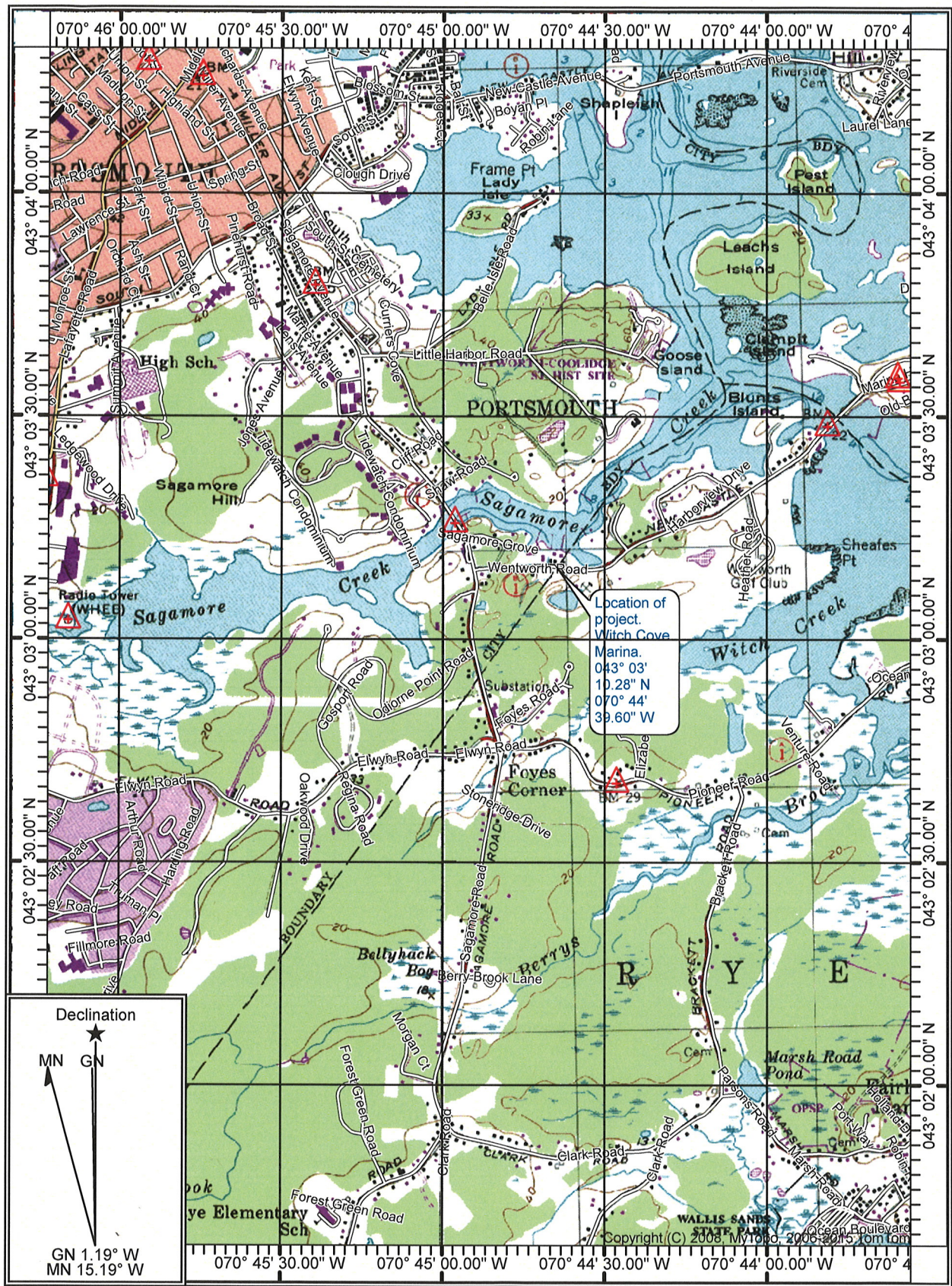
Permanent docking structure:            sq. ft. X \$2.00 = \$

Projects proposing shoreline structures (including docks) add \$200 = \$

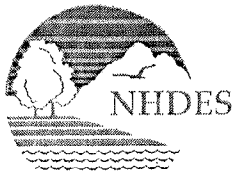
Total = \$ 33.00

The Application Fee is the above calculated Total or \$200, whichever is greater = \$ 200.00



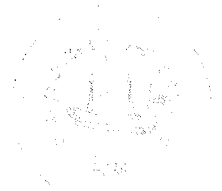






THE STATE OF NEW HAMPSHIRE  
DEPARTMENT OF ENVIRONMENTAL SERVICES  
LAND RESOURCES MANAGEMENT  
**WETLANDS BUREAU**

29 Hazen Drive, PO Box 95, Concord, NH 03302-0095  
Phone: (603) 271-2147 Fax: (603) 271-6588  
<http://des.nh.gov/organization/divisions/water/wetlands/index.htm>  
Permit Application Status: <http://des.nh.gov/onestop/index.htm>



## PERMIT APPLICATION - ATTACHMENT A MINOR & MAJOR 20 QUESTIONS

Env-Wt 302.04 Requirements for Application Evaluation - For any major or minor project, the applicant shall demonstrate by plan and example that the following factors have been considered in the project's design in assessing the impact of the proposed project to areas and environments under the department's jurisdiction. Respond with statements demonstrating:

1. The need for the proposed impact.

The existing catch basin is old and needs to be replaced and relocated to line up with the new proposed 15" culvert. The new catch basin, new culvert under Route 1B and proposed 15" culvert will improve flooding issues of 1B. The outlet of the existing catch basin is unknown and was installed many years ago with no site plan or signed easement from the landowner. The existing catchbasin continues to flood because the surrounding area including the gravel parking area. This flooding has potential to cause sediment and loose gravels to be transported directly into Sagamore Creek. The proposed work would prevent this issue, reduce erosion and improve waterquality.

2. That the alternative proposed by the applicant is the one with the least impact to wetlands or surface waters on site.

Alternative plans are not produced for this project. Because of the topography on the inlet side of the culvert and existing buildings and docks on the outlet end this is the only proposal that is buildable.

The Department also considered constructing a vegetated swale instead of the closed culver to provide some additional treatment, but this option was not condusive because it would result in a loss of parking area for the landowners.

3. The type and classification of the wetlands involved.

E1UBL, PSS1E, and Previously Disturbed TBZ

4. The relationship of the proposed wetlands to be impacted relative to nearby wetlands and surface waters.

The majority of impacts will occur within the previously disturbed tidal buffer zone. There will also be some impacts to Sagamore Creek where the new outlet is proposed. The new culvert will improve flooding issues and reduce erosion of the gravel parking area of Witch's Cove Marina.

5. The rarity of the wetland, surface water, sand dunes, or tidal buffer zone area.

The proposed project is located within the Previously disturbed tidal buffer zone. Sagamore Creek is a tidal surface water.

6. The surface area of the wetlands that will be impacted.

125 Sq ft previously disturbed TBZ

12 Sq ft. E1UBL

28 Sq ft. PSS1E

7. The impact on plants, fish and wildlife including, but not limited to:

- a. Rare, special concern species;
- b. State and federally listed threatened and endangered species;
- c. Species at the extremities of their ranges;
- d. Migratory fish and wildlife;
- e. Exemplary natural communities identified by the DRED-NHB; and
- f. Vernal pools.

a) There were no rare or special concern species identified by NHB.

b) The NHB search Identified Loesel's wide-lipped Orchid (threatened) and Northern adders-tounge fern (Endangered). However, through coordination with DRED these species are not anticipated to be impacted as a result of the proposed work. The USF&WS IPaC search identified the Northern Long-eared bat (NLEB) however the proposed work will not require any treeclearing and therefore no effect is anticipated.

c) No species were identified as being at the extremities of their ranges.

d) No migratory fish or wildlifer were identified within the project area.

e) THe NHB search identified the following natural communities: High Salt Marsh, Intertidal Flat, Low salt Marsh, and Salt Marsh system.

f) No vernal pools were identified within the project area.



8. The impact of the proposed project on public commerce, navigation and recreation.

**Public commerce and navigation should not be impacted unless more floating docks are proposed at the outlet of the new culvert. The easement will state that the outlet of the culvert cannot be covered by docks structures or increased parking to allow maintenance accesability for cleaning the culvert.**

9. The extent to which a project interferes with the aesthetic interests of the general public. For example, where an applicant proposes the construction of a retaining wall on the bank of a lake, the applicant shall be required to indicate the type of material to be used and the effect of the construction of the wall on the view of other users of the lake.

**The outlet of the new culvert to Sagamore Creek is the only visible evidence. Boaters coming into the docks may see the outlet but the existing erosion stone will be placed up against it making it less visible. Care will be taken to place the erosion stone along the wall to further hide the outlet of the new culvert.**

10. The extent to which a project interferes with or obstructs public rights of passage or access. For example, where the applicant proposes to construct a dock in a narrow channel, the applicant shall be required to document the extent to which the dock would block or interfere with the passage through this area.

**The Department of Transportation would not allow a dock to be constructed over the new culvert. This request will be included on the Maintenance Easement.**

11. The impact upon abutting owners pursuant to RSA 482-A:11, II. For example, if an applicant is proposing to rip-rap a stream, the applicant shall be required to document the effect of such work on upstream and downstream abutting properties.

**By replacing the 15" culvert under 1B, installing a new standard catch basin Type B and installing a new culvert across Witch's Cove Marina will not impact abutting properties.**

12. The benefit of a project to the health, safety, and well being of the general public.

**The new catch basin and culvert will significantly improve flooding of Route 1B preventing iceing on 1B.**

13. The impact of a proposed project on quantity or quality of surface and ground water. For example, where an applicant proposes to fill wetlands the applicant shall be required to document the impact of the proposed fill on the amount of drainage entering the site versus the amount of drainage exiting the site and the difference in the quality of water entering and exiting the site.

**The amount of runoff entering the site will be reduced by installing a standard catch basin and installing a new outlet of the basin to Sagamore Creek. In it's existing condition the failed pipe and catchbasin is trapping water that eventually fills the catchbasin and floods the gravel parking area and NHRoute 1B. The flood conditions are causing erosion of the gravel parking area which results in deposits of gravel and sands being transported into Sagamore Creek. The proposed improvement would eliminate this flooding/erosion issue whereby improving the waterquality in this area.**

14. The potential of a proposed project to cause or increase flooding, erosion, or sedimentation.

**The new installation will improve flooding and erosion of Witch's Cove Marina. Sedimentation will also be improved.**

15. The extent to which a project that is located in surface waters reflects or redirects current or wave energy which might cause damage or hazards.

**The outlet of the culvert will not have an effect on wave energy rather the wave energy will have a minor affect on the outlet flow of the culvert.**



16. The cumulative impact that would result if all parties owning or abutting a portion of the affected wetland or wetland complex were also permitted alterations to the wetland proportional to the extent of their property rights. For example, an applicant who owns only a portion of a wetland shall document the applicant's percentage of ownership of that wetland and the percentage of that ownership that would be impacted.

The cumulative impact by abutting property owners, ~5.0 square feet of visible impact by two more landowners at the outlet of two more culverts will be largely seperated, linear foot speration. The percentage affected area is small.

17. The impact of the proposed project on the values and functions of the total wetland or wetland complex.

The new drainage installation will improve the value of the wetland and how it relates to reducing the erosion of the parking area of Witch's Cove Marina.

18. The impact upon the value of the sites included in the latest published edition of the National Register of Natural Landmarks, or sites eligible for such publication.

NA

19. The impact upon the value of areas named in acts of congress or presidential proclamations as national rivers, national wilderness areas, national lakeshores, and such areas as may be established under federal, state, or municipal laws for similar and related purposes such as estuarine and marine sanctuaries.

NA

20. The degree to which a project redirects water from one watershed to another.

**The current erosion and flooding of the property is contained within this property. The proposed drainage improvements will reduce the potential of any redirection of runoff to other properties.**

Additional comments





**US Army Corps  
of Engineers®**  
New England District

**U.S. Army Corps of Engineers  
New Hampshire Programmatic General Permit (PGP)  
Appendix B - Corps Secondary Impacts Checklist  
(for inland wetland/waterway fill projects in New Hampshire)**

1. Attach any explanations to this checklist. Lack of information could delay a Corps permit determination.
2. All references to “work” include all work associated with the project construction and operation. Work includes filling, clearing, flooding, draining, excavation, dozing, stumping, etc.
3. See PGP, GC 5 regarding single and complete projects.
4. Contact the Corps at (978) 318-8832 with any questions.

<b>1. Impaired Waters</b>	Yes	No
1.1 Will any work occur within 1 mile upstream in the watershed of an impaired water? See <a href="http://des.nh.gov/organization/divisions/water/wmb/section401/impaired_waters.htm">http://des.nh.gov/organization/divisions/water/wmb/section401/impaired_waters.htm</a> to determine if there is an impaired water in the vicinity of your work area.*		X
<b>2. Wetlands</b>	Yes	No
2.1 Are there are streams, brooks, rivers, ponds, or lakes within 200 feet of any proposed work?	X	
2.2 Are there proposed impacts to SAS, shellfish beds, special wetlands and vernal pools (see PGP, GC 26 and Appendix A)? Applicants may obtain information from the NH Department of Resources and Economic Development Natural Heritage Bureau (NHB) website, <a href="http://www.nhnaturalheritage.org">www.nhnaturalheritage.org</a> , specifically the book <a href="#">Natural Community Systems of New Hampshire</a> .		X
2.3 If wetland crossings are proposed, are they adequately designed to maintain hydrology, sediment transport & wildlife passage?	X	
2.4 Would the project remove part or all of a riparian buffer? (Riparian buffers are lands adjacent to streams where vegetation is strongly influenced by the presence of water. They are often thin lines of vegetation containing native grasses, flowers, shrubs and/or trees that line the stream banks. They are also called vegetated buffer zones.)		X
2.5 The overall project site is more than 40 acres.		X
2.6 What is the size of the existing impervious surface area?	0 acres	
2.7 What is the size of the proposed impervious surface area?	0 acres	
2.8 What is the % of the impervious area (new and existing) to the overall project site?	NA	
<b>3. Wildlife</b>	Yes	No
3.1 Has the NHB determined that there are known occurrences of rare species, exemplary natural communities, Federal and State threatened and endangered species and habitat, in the vicinity of the proposed project? (All projects require a NHB determination.)	X	
3.2 Would work occur in any area identified as either “Highest Ranked Habitat in N.H.” or “Highest Ranked Habitat in Ecological Region”? (These areas are colored magenta and green, respectively, on NH Fish and Game’s map, “2010 Highest Ranked Wildlife Habitat by Ecological Condition.”) Map information can be found at: <ul style="list-style-type: none"> <li>• PDF: <a href="http://www.wildlife.state.nh.us/Wildlife/Wildlife_Plan/highest_ranking_habitat.htm">www.wildlife.state.nh.us/Wildlife/Wildlife_Plan/highest_ranking_habitat.htm</a>.</li> <li>• Data Mapper: <a href="http://www.granit.unh.edu">www.granit.unh.edu</a>.</li> <li>• GIS: <a href="http://www.granit.unh.edu/data/downloadfreedata/category/databycategory.html">www.granit.unh.edu/data/downloadfreedata/category/databycategory.html</a>.</li> </ul>	X	
3.3 Would the project impact more than 20 acres of an undeveloped land block (upland, wetland/waterway) on the entire project site and/or on an adjoining property(s)?		X
3.4 Does the project propose more than a 10-lot residential subdivision, or a commercial or industrial development?		X
3.5 Are stream crossings designed in accordance with the PGP, GC 21?		X

# Memo



NH NATURAL HERITAGE BUREAU  
NHB DATACHECK RESULTS LETTER

To: Ralph Sanders, NH DOT  
PO Box 740  
Durham, NH 03824

From: Amy Lamb, NH Natural Heritage Bureau  
Date: 7/16/2015 (valid for one year from this date)  
Re: Review by NH Natural Heritage Bureau  
NHB File ID: NHB15-2309  
Description: Replace existing culvert under Route 1B, replace existing culvert with new culvert with 3' sump and outlet culvert to Sagamore Creek.

Town: Portsmouth  
Location: Tax Maps: Map 201, Lot 12

As requested, I have searched our database for records of rare species and exemplary natural communities, with the following results.

**Comments:** This project is adjacent to records of two rare plants and is close to a sensitive salt marsh system. Please send photos of the area to be impacted, and describe how construction methods will prevent adverse effects to intertidal areas. Please also explain why a sump is being used to control the flow of the stream through the culvert.

Natural Community	State <sup>1</sup>	Federal	Notes
High salt marsh	--	--	Threats to these communities are primarily alterations to the hydrology of the wetland (such as ditching or tidal restrictions that might affect the sheet flow of tidal waters across the intertidal flat) and increased input of nutrients and pollutants in storm runoff.
Intertidal flat	--	--	Threats to these communities are primarily alterations to the hydrology of the wetland (such as ditching or tidal restrictions that might affect the sheet flow of tidal waters across the intertidal flat) and increased input of nutrients and pollutants in storm runoff.
Low salt marsh	--	--	Threats to these communities are primarily alterations to the hydrology of the wetland (such as ditching or tidal restrictions that might affect the sheet flow of tidal waters across the intertidal flat) and increased input of nutrients and pollutants in storm runoff.
Salt marsh system	--	--	Threats are primarily changes to the hydrology of the system, introduction of invasive species, and increased input of nutrients and pollutants.

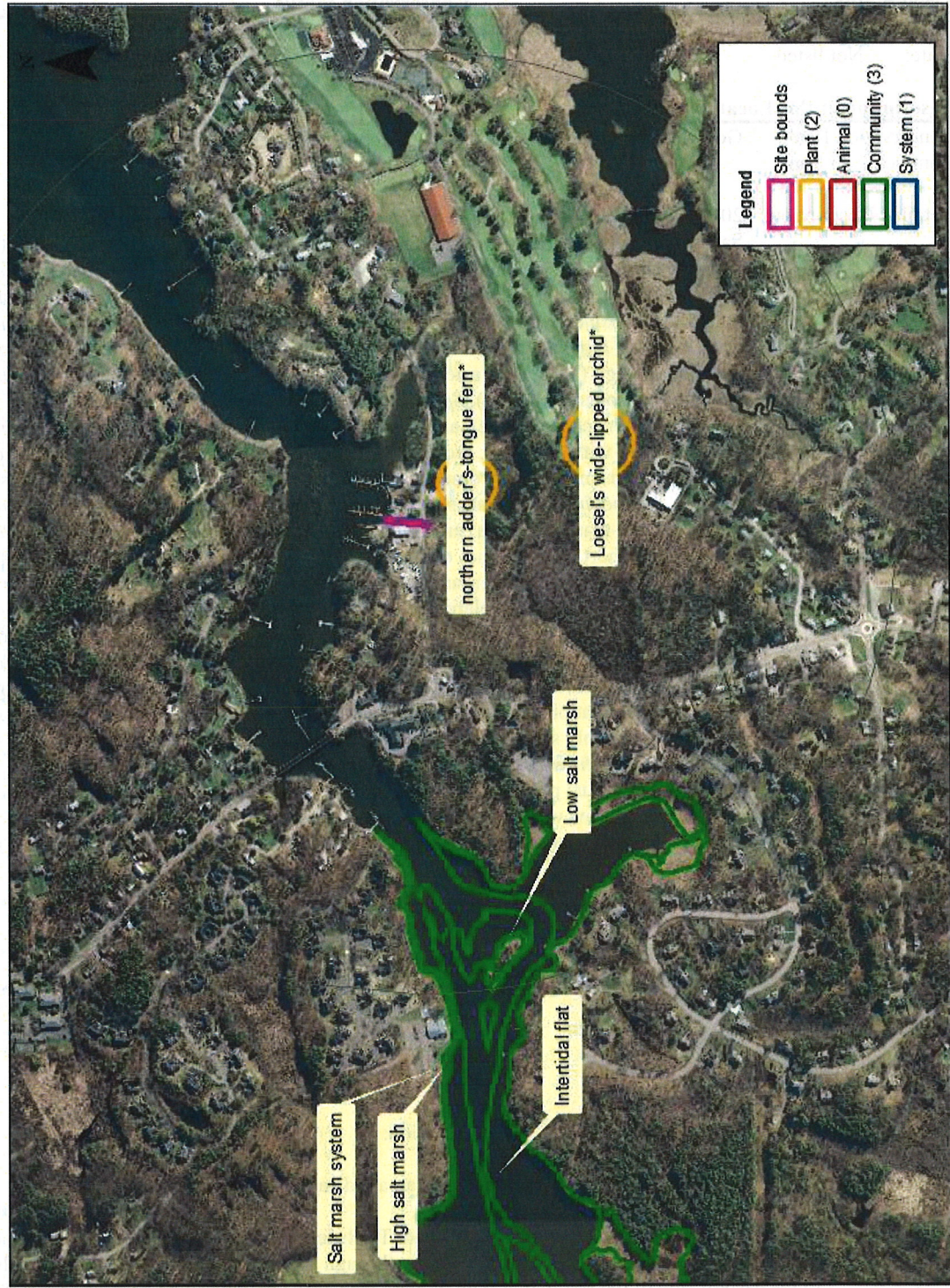
Plant species	State <sup>1</sup>	Federal	Notes
Loesel's wide-lipped orchid ( <i>Liparis loeselii</i> )*	T	--	This inconspicuous orchid occurs in a variety of wet, sunny habitats. Threats include

Department of Resources and Economic Development  
Division of Forests and Lands  
(603) 271-2214 fax: 271-6488

DRED/NHB  
172 Pembroke Rd.  
Concord, NH 03301



NHB15-2309



**Dates documented**

---

First reported: 1997-06-18

Last reported: 2006-05-24



be accessed from the Rte. 1 bridge on the western side.

**Dates documented**

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First reported:	1997-06-18	Last reported:	2006-05-24
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NHB15-2309

EOCODE:

CE00000003\*030\*NH

## New Hampshire Natural Heritage Bureau - Plant Record

Loesel's wide-lipped orchid (*Liparis loeselii*)**Legal Status**

Federal: Not listed  
State: Listed Threatened

**Conservation Status**

Global: Demonstrably widespread, abundant, and secure  
State: Imperiled due to rarity or vulnerability

**Description at this Location**

Conservation Rank: Historical records only - current condition unknown.  
Comments on Rank: 'Extirpated' based on note on specimen label about dredge spoils. Date of extirpation vs. specimen collection unknown.

Detailed Description: 1968: Specimen collected.  
General Area: 1968: Wet margin of quarry pond.  
General Comments: 1968(?): Site destroyed by dumping dredge spoils.  
Management  
Comments:

**Location**

Survey Site Name: Quarry Pond  
Managed By:

County: Rockingham  
Town(s): Rye  
Size: 2.8 acres                      Elevation: 20 feet

Precision: Within (but not necessarily restricted to) the area indicated on the map.

Directions: Rye-Portsmouth town line. Wet margin of quarry pond. Wentworth House Pond.

**Dates documented**

First reported: 1968-08                      Last reported: 1968-08



## Ralph Sanders

---

**From:** Lamb, Amy <Amy.Lamb@dred.nh.gov>  
**Sent:** Thursday, July 30, 2015 8:51 AM  
**To:** Ralph Sanders  
**Subject:** RE: Portsmouth 1B / NHB15-2309

Hi Ralph,

Thanks for sending that additional photo and previously for explaining the function of the sump, as well as erosion control measures that will be in place during construction. Since no vegetation will be disturbed as a part of this project, and a turbidity curtain will be installed at the culvert outlet, NHB has no concerns about the project. If anything should change, please contact me for further review.

Thank you again for providing the photos.

Amy

Amy Lamb  
Ecological Information Specialist  
(603) 271-2215 ext. 323

NH Natural Heritage Bureau  
DRED - Forests & Lands  
172 Pembroke Rd  
Concord, NH 03301

-----Original Message-----

From: Ralph Sanders [<mailto:RSanders@dot.state.nh.us>]  
Sent: Monday, July 27, 2015 1:51 PM  
To: Lamb, Amy  
Subject: Portsmouth 1B

Amy, inlet of culvert under 1B. The culvert will be replaced up kind. No need to impact surrounding vegetation. Please let me know if more photos are needed.

-----Original Message-----

From: Ralph Sanders [<mailto:RSanders@dot.state.nh.us>]  
Sent: Tuesday, July 21, 2015 12:06 PM  
To: Lamb, Amy  
Subject: NHB15-2309

Amy, I will answer the questions on page one of the NHB Datacheck results Letter. I sent 3 photos from my phone of the area. Please let me know if you need more. The construction method is across a gravel parking lot. Silt Sox will be installed prior to construction to prevent transport of silt and gravel during rain events if any. Turbidity curtain will be installed where the outlet to Sagamore Creek is located to the right of the wooden shack. The sump on the catch basin is a standard installation in drainage design and construction. The sump allows for settlement of aggregates and other debris that may enter the catch basin through the grate.

Lori Sommer asked if it passed the stream crossing rules. Tony said that the structure will pass the Q100 after the project is completed. Lori Sommer said that no mitigation would be required.

*This project has not been previously discussed at a Monthly Natural Resource Agency Coordination Meeting.*

#### **Rumney, 40080, Non-Federal**

Tony Weatherbee provided an overview of the project. The scope of the project is to rehabilitate the bridge that carries Stinson Lake Road over Stinson Brook (Bridge 139/153). The existing structure is a concrete arch bridge with a 29' span and is 28' wide. The abutments are undermined and need toewalls installed to stabilize the structure. The purpose of this project is to stabilize the structure with the toewalls and then protect it from future undermining by installing riprap.

C. Henderson suggested that the toewalls be tapered so critters can easily crawl up on to them. Tony Weatherbee said that they will be tied into the surrounding bank so they do not create an abrupt edge.

Lori Sommer asked if the structure will pass the Q100 when the project is completed. T. Weatherbee said that it would pass the Q100 when completed.

Mark Kern asked how long the project would take to complete. T. Weatherbee said it would take a few weeks if everything goes according to plan.

C. Henderson asked when construction would take place and Tony said at the end of November.

Lori Sommer said that no mitigation would be required.

*This project has not been previously discussed at a Monthly Natural Resource Agency Coordination Meeting.*

#### **Portsmouth, 2015-M610-1, Non-Federal**

Ralph Sanders opened the meeting by explaining that the landowner has asked the Department to install new drainage across the parking area to help with flooding and erosion issues. District Six has proposed to install a new catch basin, 15" culvert that will outlet to Sagamore Creek.

New crushed gravel may need to be placed on the parking area to provide cover over the culvert that will fall within the upland tidal buffer zone.

Lori Sommer asked if there is an existing culvert on the property in question. R. Sanders responded: yes, but did not know where the outlet is if there is one.

L. Sommer indicated that this project would likely require mitigation

R. Sanders noted that the NHB response had not been received after being submitted for 2 months.

Gino Infascelli asked if the new catch basin will pick up additional flows. R. Sanders answered with a no. R. Sanders commented that the landowner wants to connect to the culvert with another catch basin to drain another section of property. G. Infascelli and Mike Hicks from USACE said that would not be allowed.

M. Hicks indicated the project would likely be able to go as SPGP.

G. Infascelli also commented this will qualify a Major Impact and will have to be approved by Governor & Council.

*This project has not been previously discussed at a Monthly Natural Resource Agency Coordination Meeting.*

#### **Rye, 2015-M610-2, Non-Federal**

Ralph Sanders opened the meeting by explaining a 30" RCP culvert that is located in NH Route 1A in Rye and needs to be lined because the joints of the culvert have separated. The separations of the joints cause seaweed to catch plugging the culvert and preventing the marsh to drain and flooding neighboring property. The existing culvert will be lined with a smooth liner. The liner is 3/4" wall thickness. The culvert extends 65 feet onto the shore. District 6 proposes to shorten the culvert 65' and regrade the riprap along the shore.

R. Sanders asked if a check valve system would be allowed to install on the ocean end of the culvert.

Chris Williams of NH DES Coastal Program said it would not be allowed because the marsh needed more salt water than it was currently receiving.

Mike Hicks of the USACE was okay with the proposed liner but C. Williams of NH DES Coastal Program commented that an earlier hydraulic study of the culvert revealed the culvert was under sized and C. Williams requested that the DOT complete hydraulic analysis to further analyze the effects of the proposed sliplining.

R. Sanders said that will be done.

C. Williams was also concerned with invasive species such as phragmites and thought removing some from this area could be considered mitigation.

Christine Perron indicated that was not something DOT would likely want to try and tackle as mitigation.

Matt Urban indicated that it was the Department's hope to consider this work self-mitigating if we can show via the hydraulic analysis that there will be no change and/or an improvement to the pipes ability to function hydraulically.

It was decided a follow up meeting was needed to further discuss the results of the hydraulic study.

*This project has not been previously discussed at a Monthly Natural Resource Agency Coordination Meeting.*



M610**Wetland Application – NHDOT Cultural Resources Review**

For the purpose of compliance with regulations of the National Historic Preservation Act, the Advisory Council on Historic Preservation's *Procedures for the Protection of Historic Properties* (36 CFR 800), the US Army Corps of Engineers' *Appendix C*, and/or state regulation RSA 227-C:9, *Directive for Cooperation in the Protection of Historic Resources*, the NHDOT Cultural Resources Program has reviewed the enclosed Standard Dredge and Fill Application for potential impacts to historic properties.

**Above Ground Review – NHDOT District 6, Witch Cove Marina 043°03'10.28 N; 070°44'39.60" W**

Known/approximate age of structure: "installed many years ago with no site plan or signed easement from the landowner"

Due to a failed pipe and catch basin causing widespread flooding and erosion,

The project proposes to:

- remove an existing 15" catch basin (CMP) under Route IB (Wentworth Rd) and from drive entrance;
- replace in kind with a new 15" catch basin Type B (HDPE) with 3' sump and install a new culvert across Witch's Cove Marina that outlets to Sagamore Creek.

☒ No Potential to Cause Effect/No Concerns

☐ Concerns:

**Below Ground Review**

Recorded Archaeological site: ☐ Yes ☒ No

Nearest Recorded Archaeological Site Name & Number: 27-RK-0121 First Rye Bridge

☐ Pre-Contact ☒ Post-Contact

Distance from Project Area: 1950 ft (594 meters) south of project area

☒ No Potential to Cause Effect/No Concerns

While the location is just south of Sagamore Creek, the project is located within a modified landscape. In fact, this project represents the chosen alternative due to the topography on the inlet side of the culvert & the existing buildings and docks on the outlet end. The failed pipe and catch basin are causing flooding that results in sediment & loose gravel from the parking lot to be washed into Sagamore Creek. In addition, the DES permit application indicates that, "The majority of impacts will occur within the previously disturbed tidal buffer zone."

From the south to the north, the project extends from the south side of Route IB/Wentworth Road, through the road bed, through a filled and graded parking area, and outlets into Sagamore Creek at an existing riprap and stone wall embankment. The soils series unit is very stony Chatfield-Hollis-Canton complex (3-8%).

☐ Concerns:

Reviewed by:

3.1.2016



NHDOT Cultural Resources Staff

3/2/2016

Date:

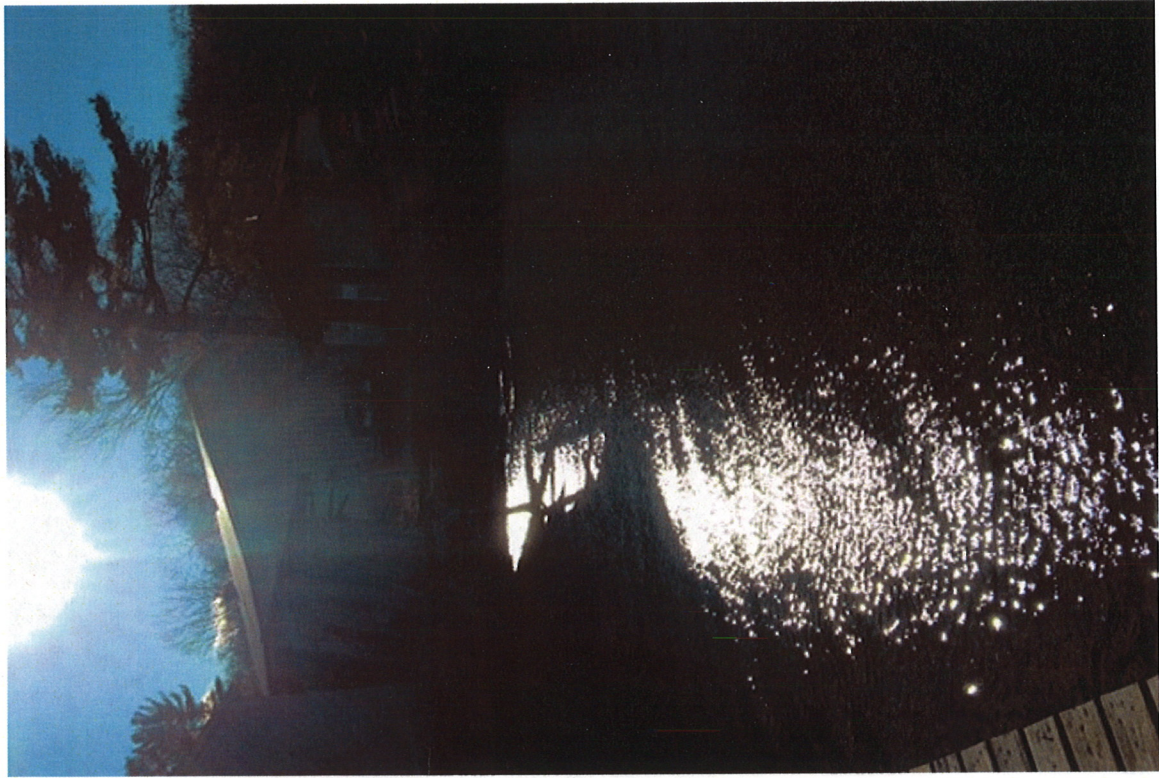
**DES AQUATIC RESOURCE MITIGATION FUND  
STREAM PAYMENT CALCULATION**

<b>INSERT LINEAR FEET OF IMPACT on BOTH BANKS AND CHANNEL</b>	<b>Right Bank</b>	0.00
	<b>Left Bank</b>	4.0000
	<b>Channel</b>	0.0000
	<b>TOTAL IMPACT</b>	4.0000
	<b>Stream Impact Cost:</b>	\$800.00
	<b>DES Administrative cost:</b>	
		\$160.00
<b>***** TOTAL ARM FUND STREAM PAYMENT*****</b>		
		\$960.00



TBZ LOOKING BACK TOWARDS WENTWORTH RD,





VIEW FROM DOCK LOOKING BACK AT  
IMPACT AREA 'B'



TBZ TO IMPACT AREA 'B'



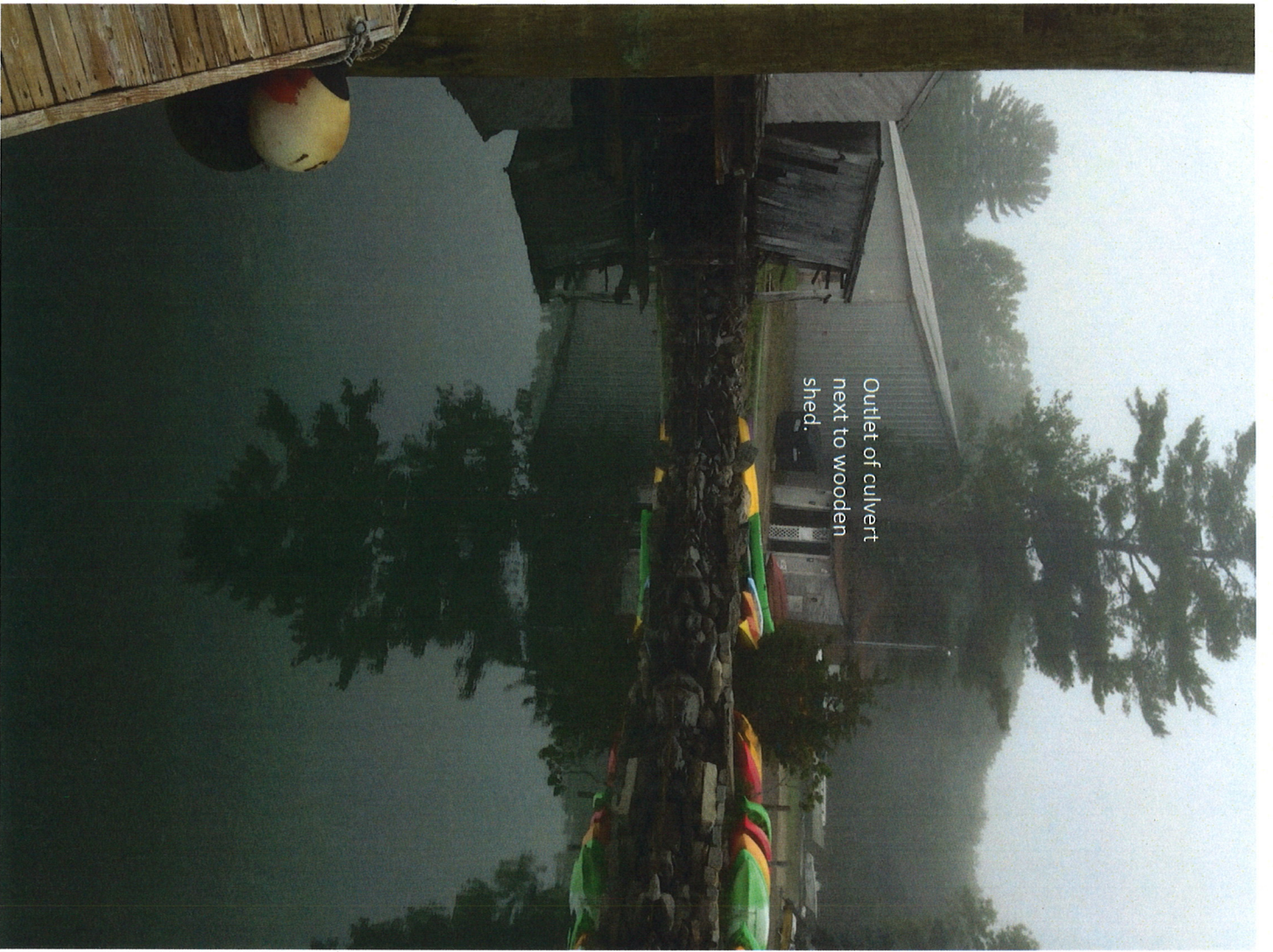
Looking Southerly





Looking northerly towards  
Sagamore Creek





Outlet of culvert  
next to wooden  
shed.











